What is claimed is:

1.   A method of monitoring the operation of a group of currency acceptors in a transaction system in which performance data from the acceptors is analyzed to determine whether an aspect of the performance of a

5   plurality of acceptors differs in a similar way from an expected distribution, thereby indicating that external influences are likely to have caused that performance difference.

2.   A method as claimed in claim 1, including using past

10   performance data from the acceptors to determine whether the performance of said plurality of acceptors has altered in said similar way.

3.   A method as claimed in claim 1, including determining whether the performance data from said plurality of acceptors indicates a

15   statistically significant difference in performance as compared with other acceptors.

4.   A method as claimed in claim 1, wherein the performance data for the group of acceptors is transferred for analysis to a server.

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5.   A method as claimed in claim 1, wherein each currency acceptor is arranged to transmit performance data for analysis in response to detection of one of a plurality of predetermined conditions, and in which said

determining step is performed in dependence upon the number of currency acceptors transmitting performance data representative of a similar predetermined condition.

5   6.   A method as claimed in claim 1, wherein the performance data includes at least first performance data and second performance data, means being provided to request the second performance data from a currency acceptor in dependence upon the content of the first performance data for that currency acceptor.

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7.   A method as claimed in claim 1, wherein the performance data includes data dependent upon measurements made of currency articles.

8.   A method as claimed in claim 7, wherein the performance data

15   includes data dependent upon measurements made of rejected currency articles.

9.   A method as claimed in claim 8, wherein the performance data indicates which of a plurality of measurements caused rejection of the article.

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10.   A method as claimed in claim 9, wherein the performance data distinguishes between those measurements which are responsible for rejection

because they are found to be too low and those which are found to be too high.

11.   A method as claimed in claim 7, wherein each currency acceptor is arranged to recognise articles belonging to a predetermined set of classes, the method including the step of analysing the performance data in order to determine whether this indicates that a plurality of currency acceptors have been receiving articles belonging to a further class which differs from any of the predetermined set.

12.   A method as claimed in claim 11, including analysing the performance data in order to derive, at least, data representing the means of the measurements of articles of said further class.

13.   A method as claimed in claim 11, including the step of sending to at least one currency acceptor an instruction which causes the currency acceptor to begin to recognise currency articles of said further class.

14.   A method as claimed in claim 13, including the step of transferring measurement criteria to said currency acceptor for use in evaluating measurements of currency articles to determine whether they belong to said further class.

15.   A method as claimed in claim 1, wherein the determining step takes into account data representing the geographical distribution of the currency acceptors.

5   16.   A method as claimed in claim 1, wherein each currency acceptor is operable to dispense stored currency articles of respective different denominations, the performance data including data dependent upon changes in the levels of respective denominations stored for dispensing.

10   17.   A method as claimed in claim 16, wherein the performance data is dependent upon the number of times the quantity of a stored denomination has become inadequate to allow dispensing.

18.   A method as claimed in claim 16, wherein each currency

15   acceptor has re-configurable storage facilities so as to permit changing of the maximum number of currency articles of different denominations which can be stored, the method including the step of analysing the performance data from the respective currency acceptors to determine how at least a plurality of the currency acceptors should be re-configured in order to reduce the

20   likelihood of a stored denomination becoming depleted.

19.   A method as claimed in claim 16, wherein the performance data comprises indications of the quantities of stored currency articles of

respective different denominations prior to a change-replenishing operation on a currency acceptor which leaves the quantities of stored currency articles at respective float levels.

5   20.   A method as claimed in claim 19, including the step of determining, for at least a plurality of currency acceptors, an adjusted float level for a stored denomination.

      21.   A method as claimed in claim 1, including the step of
10   generating measurement criteria for use by the currency acceptors to recognise articles, the measurement criteria being generated by analysing article measurements contained in said performance data.

      22.   A method as claimed in claim 21, including the step of
15   transmitting the measurement criteria to the currency acceptors.

      23.   A transaction system comprising a plurality of acceptors and means for performing a monitoring operation as claimed in claim 1.

20   24.   A method of operating a transaction system which comprises a plurality of currency acceptors, the method comprising installing the acceptors in host machines, performing individual transactions using the machines, collecting performance data from the acceptors, performing a

statistical analysis on the performance data from the acceptors, deriving re-configuration data for at least one acceptor as a result of the statistical analysis and re-configuring said at least one acceptor on the basis of the re-configuration data.

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25.   A method as claimed in claim 24, wherein the performance data includes data dependent upon measurements made of currency articles.

26.   A method as claimed in claim 25, wherein the re-configuration
10   data includes measurement criteria used by the acceptor for classifying currency articles.